

USER MANUAL

AVG-UDA4
HDMI Splitter

All Rights Reserved
Version: UDA4_2015V1.0



The AVG-UDA4 is an HDMI splitter featuring the capability to split an HDMI source to 4 displays simultaneously.

Features

- 4 simultaneous HDMI outputs
- Supports Hot-plugging
- Compliant with HDMI 1.4, capable of transmitting 1080p 3D & 4K signals
- Transmits 1080p HDMI up to 15m
- High bandwidth: 10.2Gbps
- HDCP compliant
- Auto-identifies input resolution
- Supports EDID management, automatically adopting the resolution of the first detected display from port 1~4
- Intuitive indicator for connection status & input HDCP compliance status
- Convenient online firmware update

**PLEASE READ THIS PRODUCT MANUAL CAREFULLY
BEFORE USING THIS PRODUCT.**

This manual is only for operation instruction only, and not to be used in a maintenance capacity. The functions described in this version are current as at March 2015. Any changes of functions and operational parameters will be updated in future manual versions. Please refer to your dealer for the latest product details.

Version 1.0 1/3/15

SAFETY OPERATION GUIDE



In order to guarantee the reliable operation of the equipment and safety of the user, please abide by the following procedures in installation, use and maintenance:

1. The system must be earthed properly. Please do not use two blade plugs and ensure the AC power supply ranges from 100v to 240v and from 50Hz to 60Hz.
2. Do not install the switcher in an environment where it will be exposed to extreme hot or cold temperatures.
3. This unit will generate heat during operation, please ensure that you allow adequate ventilation to ensure reliable operation.
4. Please disconnect the unit from mains power if it will be left unused for a long time.
5. Please DO NOT try to open the casing of the equipment, DO NOT attempt to repair the unit. Opening the unit will void the warranty. There are high voltage components in the unit and attempting to repair the unit could result in serious injury.
6. Do not allow the unit to come into contact with any liquid as that could result in personal injury and product failure.

TABLE OF CONTENTS

Introduction	1
Introduction to the AVG-UDA4.....	1.1
Features	1.2
What's in the Box	2
Product Appearance of the AVG-UDA4	3
Front Panel	3.1
Rear Panel.....	3.2
System Connection.....	4
System Applications	4.1
Usage Precautions	4.2
Connection Diagram	4.3
Connection Procedure	4.4
System Operations.....	5
EDID Management	5.1
Firmware Upgrade	5.2
Specifications	6
Supported Input Video Formats	6.1
Panel Drawing	7
Troubleshooting & Maintenance	8

1. Introduction

1.1. Introduction to the AVG-UDA4

The AVG-UDA4 is an HDMI splitter featuring the capability to split an HDMI source to 4 displays simultaneously. Compliant with HDMI 1.4 & HDCP1.4, the AVG-UDA4 provides comprehensive resolution capabilities up to 4K & 1080p 3D. It is able to automatically recognize the resolution and HDCP compliant status of the input signal. The input signal will be automatically equalized for reliable transmission with true EDID Management.

The AVG-UDA4 also supports convenient online updates through the USB port.

1.2. Features

- 4 simultaneous HDMI outputs
- Supports Hot-plugging
- Compliant with HDMI 1.4, capable of transmitting 1080p 3D & 4K signals
- Transmits 1080p HDMI up to 15m
- High bandwidth: 10.2Gbps
- HDCP compliant
- Auto-identifies the input resolution
- Supports EDID management, automatically adopts the resolution of the first detected display from port 1~4
- Intuitive indicator for connection status & input HDCP compliance status
- Convenient online firmware updates

2. Package List

- 1 x AVG-UDA4
- 2 x Mounting ears (separate from AVG-UDA4)
- 4 x Screws
- 4 x Plastic cushions
- 1 x Power Adapter (DC 5V 1A)
- 1 x User Manual

Note: Please confirm if the product and all accessories are all included, if not, please contact your dealer.

3. Product Appearance of the AVG-UDA4



3.1. Front Panel

No.	Name	Description
①	Power indicator	Illuminates red once powered on
②	Input HDCP compliant Indicator	Indicates the HDCP compliance status of the input signal ▪ Illuminates green when the input signal contains HDCP ▪ Blinks green when the input signal does not have HDCP ▪ Remains off when there is no input signal
③	Output signal Indicators	Illuminates green when there is HDMI being output, corresponds to HDMI OUTPUT 1~4 separately
④	FIRMWARE	USB port, used for firmware updates

Note: Output HDCP compliance status depends on the input signal. When the input signal contains HDCP, then the output signal will contain HDCP and vice versa.

3.2. Rear Panel



No.	Name	Description
①	IN	HDMI input port. connect with HDMI or DVI source device such as DVD/ Blu-ray
②	OUT	HDMI output ports, connect to HDMI displays, automatically capture the input resolution
③	DC 5V	Power socket, plug a DC 5V power adapter into this socket and tighten the screw.

Note:

- a) Pictures shown in this manual are for reference only, different model and specifications are subject to updates of the actual product.
- b) The HDMI signals contain both the HDMI video signal and embedded audio signal (PCM, Dolby Digital, DTS, DTS-HD)

4. System Connection

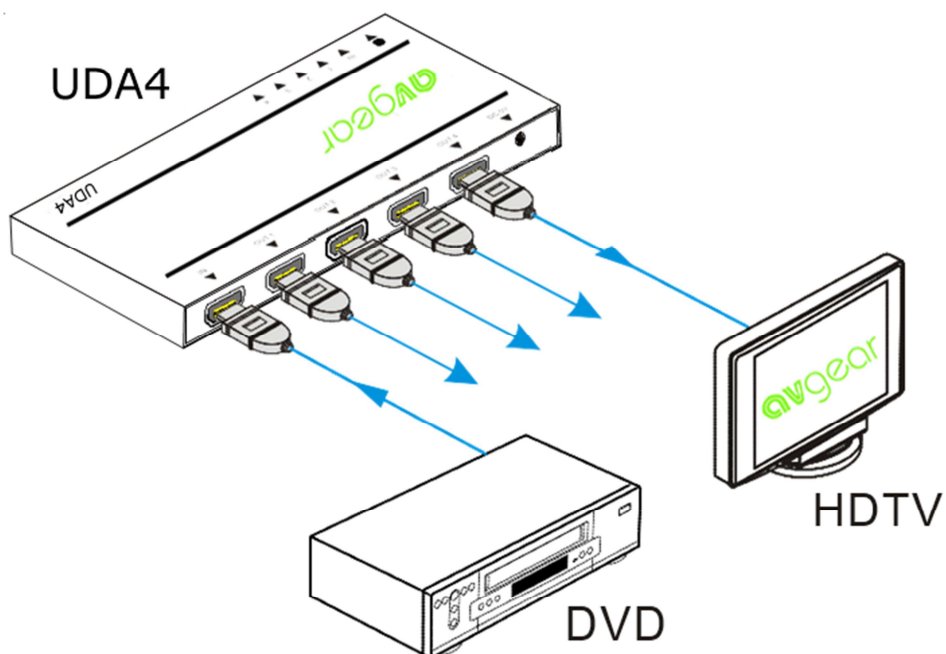
4.1. System Applications

Reliable performance for control and transmission makes the AVG-UDA4 ideal in theresidential installations, signal monitoring, large screen displays, conference systems, television broadcast, education, banking and security, etc.

4.2. Usage Precautions

1. The system should be installed in a clean environment with temperature and humidity maintained to within equipment specifications.
2. All of the power switches, plugs, sockets and power cords should be insulated and safe.
3. All devices should be connected before power is turned on.

4.3. Connection Diagram



4.4. Connection Procedure

- Step 1.** Connect a HDMI source device (e.g. Blu-ray DVD) to the HDMI INPUT socket of AVG-UDA4 with an HDMI cable
- Step 2.** Connect HDMI displays to the HDMI OUTPUT sockets of the AVG-UDA4 with an HDMI cable.
- Step 3.** Plug a DC 5V power adapter to the power port of AVG-UDA4.

Note: All the ports support hot-plugging. It's important to know that hot plugging a display may result in a temporary picture interruption at all connected output devices.

5. System Operations

5.1. EDID Management

AVG-UDA4 comprises of 1 HDMI input port & 4 HDMI output ports, EDID management aids distribution and routing of signals from the source at the resolution of the first detected display (detecting from output 1~4).

For example: when output 1 connects with a 1080p display, AVG-UDA4 will select 1080p as output resolution and distribute 1080p signal to displays connected to output 1~4.

Note: If the displays connected to output 2~4 don't support 1080p signal, there will be no output on the displays.

5.2. Firmware Upgrade

AVG-UDA4 boasts a USB port for online firmware upgrades. Follow these steps to upgrade firmware:

Step 1. Copy the latest upgrade file (.hex) to your PC.

Step 2. Connect the USB ports of the AVG-UDA4 and the PC via a USB cable.

Step 3. Double-click the file icon, it will enter the upgrade interface shown as below:



Step 4. Select the right port number in the dropdown list of PORT, and click OpenFile to load the upgrade file. Click Start to start firmware upgrading.

6. Specifications

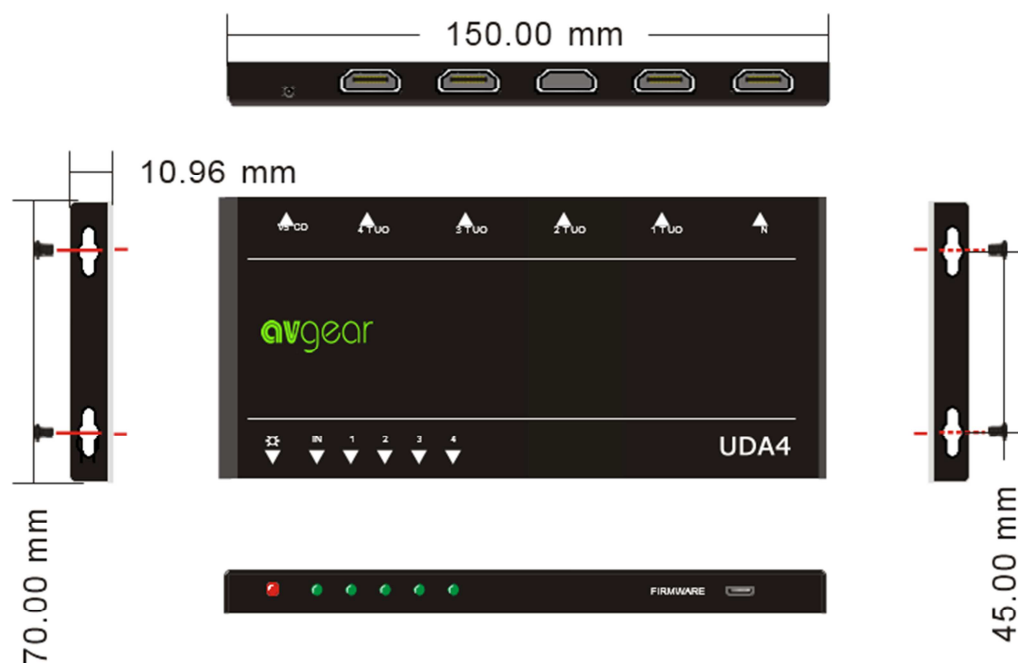
Video Input			
Input		1 HDMI	
Input Connector		1 female type A HDMI 1.4	
Min/ Max Signal Level		T.M.D.S. 2.9V~3.3V	
Input Impedance		Differential 100Ω	
Video Output			
Output		4 HDMI	
Output Connector		1 female type A HDMI 1.4	
Min/ Max Signal Level		T.M.D.S. 2.9V~3.3V	
Output Impedance		Differential 100Ω	
Video General			
Max data rate		10.2Gbit/s	
Max Resolution		4Kx2K, 1080P 3D@60Hz	
Max Pixel Clock		340MHz	
Gain		0dB	
HDCP		Compliant with HDCP1.4	
EDID		In-built EDID management	
General			
Temperature	-10 ~ +40℃	Reference Humidity	10% ~ 90%
Power	DC 5V 1A	Power Consumption	3.6W (Max)
Dimension	(W*H*D)150x11x70mm	Weight	0.12kg

6.1. Supported Input Video Formats

Input Resolution	HDMI	DVI
720 x 480@60Hz	☑	☑
720 x 480I@30Hz	☑	☑
720 x 576@50Hz	☑	☑
720 x 576I@25Hz	☑	☑
1280 x 720@50Hz	☑	☑
1280 x 720@60Hz	☑	☑
1920 x 1080@25Hz	☑	☑
1920 x 1080@50Hz	☑	☑
1920 x 1080@60Hz	☑	☑
1920 x 1080I@25Hz	☑	☑
1920 x 1080I@30Hz	☑	☑
3840 x 2160@25Hz	☑	
3840 x 2160@30Hz	☑	
1080P 3D@60Hz	☑	

Note: The AVG-UDA4 supports 4K & 3D HDMI signals, please use quality HDMI cables compliant with HDMI1.4 for better transmission when connecting 4K or 3D sources.

7. Panel Drawing



8. Troubleshooting & Maintenance

Problems	Causes	Solutions
Color loss or no video signal output	The Connection of the cabling may be incorrect or faulty	Check whether the cables are connected correctly and in working condition.
	Failed or loose connection	Make sure the connection is secure
No Video output when switching	No signal at the input / output end	Check with oscilloscope or multimeter if there is any signal at the input/ output end.
	Failed or loose connection	Make sure the connection is good
	The display doesn't support the input resolution.	Switch to another input source or enable the display to learn the EDID data of the input.
	Failed or loose power connection	Check whether the cables are connected correctly
Power Indicator remains off when powered on	Faulty HDMI Cable	Change for another HDMI cable which is in good working condition.
EDID management does not work normally There is a blank screen on the display when switching	The display does not support the resolution of the video source.	Switch again.
		Manage the EDID data manually to make the resolution of the video source automatically compliant with the output resolution.
	Wrong connection	Check to ensure the connection between the control device and the unit
Static becomes stronger when connecting the video connectors	Poor grounding or the device has a previous fault	Check the grounding and make sure it is connected securely